

lateral outer spines, and a stout terminal spine accompanied by a slender seta; the armature of the male differing a little from that of the female.

Both sexes commensal in the mantle cavity of pelecypod Mollusca.

Genotype.—*Myocheres major* (Williams), n. comb.

Myocheres major (Williams), n. comb.

Lichomolgus major Williams, 1907: 77, pl. 3.

Mycicola major, C. B. Wilson, 1932: 347, fig. 208, a-c; Monod and Dollfuss, 1934: 316.

Mycicola spinosa, Pearse, 1947: 5, figs. 26-31.

A detailed description of both adult and development forms of the genotype, based upon Canadian specimens and topotypes from Rhode Island, is in preparation and will be published in the near future. This will include also a discussion of the genus *Mycicola*, the systematic position of both genera and of other species that have been erroneously ascribed to *Mycicola*, with a redescription of the type, *Mycicola metisiensis* R. R. Wright.

Both *Myocheres* and *Mycicola* are found in the common clam, *Mya arenaria*. I am indebted

to Dr. J. C. Medcof, of the Fisheries Research Board of Canada, and to Dr. Fenner A. Chace, Jr., of the United States National Museum, for collections made of both of these genera. In addition, the collection upon which Pearse (1947) based his paper on the molluscan parasites from the Beaufort region has also been available. From the study of these it has been possible to establish the synonymy of *Mycicola spinosa* and *Myocheres major*.

LITERATURE CITED

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MAMMALOGY.—*Two new shrews of the genus Cryptotis from Panama*.¹ HENRY W. SETZER, U. S. National Museum.

Three specimens of shrews from Chiriquí Province, Republic of Panama, referred to the United States National Museum for identification have been found to be hitherto undescribed. Two of the specimens were obtained by Dr. Eric Graetz and presented by James Zetek; the other specimen was obtained by Dr. R. K. Enders. I am indebted to Dr. H. Radelyffe Roberts, of the Academy of Natural Sciences of Philadelphia for the privilege of examining and describing the Enders specimen.

Capitalized color terms are from Maerz and Paul, *A dictionary of color* (1930). Measurements are in millimeters.

These new shrews may be known as:

Cryptotis zeteki, n. sp.

Type.—Female, adult, U.S.N.M. no. 290466; Cerro Punta (lat. 8°42' N., long. 82°48' W.), 6,500 feet, Chiriquí Province, Republic of Panama; obtained in April 1949 by Dr. Eric Graetz,

presented by James Zetek. (Specimen in alcohol from which the skull has been removed and cleaned.)

Range.—Known only from the type locality.

Diagnosis.—Entire dorsal surface Mummy Brown, no appreciable lightening on sides or belly; hands and feet whitish; tail lighter than dorsal coloration. Skull: Dorsal surface, above posterior margin of palate, but slightly concave; canines but slightly procumbent; maxillary toothrow, especially unicuspid series, crowded until fourth unicuspid is forced out of toothrow medially; rostrum short and relatively wide; teeth but lightly pigmented.

Comparisons.—*Cryptotis zeteki* differs from *C. jacksoni* from Volcán Irazú, Costa Rica, in somewhat smaller size, especially the tail and hind foot; somewhat lighter in color; skull smaller in all measurements taken with the exception of the width of M¹, which is wider; unicuspid series more crowded; all teeth less pigmented; parietal sloping more anteriorly; entire rostrum shorter and slenderer.

¹ Received June 21, 1950.

From *Cryptotis merus*, from Mount Pirre, Panama, *C. zeteki* differs in lighter color, especially the hands and feet which are very pale; skull smaller in all measurements taken; brain case less inflated; unicuspid series more crowded; skull less concave above orbits; anterior teeth less procumbent. The two species are about the same size.

C. zeteki differs from *Cryptotis gracilis* from head of Lari River, Pico Blanco, Costa Rica, as follows: Color lighter in all respects, especially the hands and feet; skull smaller in most measurements taken; zygomatic width, width of M^1 , and width of M^2 - M^2 all greater; rostrum shorter and wider; unicuspid series more crowded; brain case less inflated; teeth less pigmented. The two are about the same size.

C. zeteki differs from *Cryptotis nigrescens* from Tablazo, Province of Cartago, Costa Rica, in smaller size; lighter color, including the hands and feet and in the extreme reduction of the fourth unicuspid, which, in *C. nigrescens* is still retained in the tooththrow.

From *Cryptotis orophila* from Estrella de Cartago, Province of Cartago, Costa Rica, *C. zeteki* differs in uniformly darker color; more crowded tooththrow; and narrower, shorter rostrum.

Measurements.—The type measures as follows (external measurements from alcoholic specimen): Total length 83; length of tail 22; length of hind foot 11; length of upper tooththrow entire 8.3; zygomatic width 5.7; greatest length of skull 18.5; greatest width of skull 8.9; width of M^1 1.7; condylobasal length 18.1; width across M^2 - M^2 5.0.

Remarks.—This shrew, as may be noted from the comparisons, is readily distinguishable from all other shrews from Central America by means of the extremely crowded unicuspid series.

Cryptotis zeteki appears to be most closely related, morphologically, to *Cryptotis nigrescens* from Costa Rica.

Both the type and paratype were taken by Dr. Graetz at Cerro Punta as a result of land clearing by the natives of that area.

Specimens examined.—Two, both from Cerro Punta.

Cryptotis endersi, n. sp.

Type.—Adult, skin and skull, no sex given on original label, Acad. Nat. Sci. Philadelphia no. 20955; Cylindro, Province of Chiriquí, Panama;

obtained July 24, 1941, by R. K. Enders, original number 3310.

Range.—Known only from the type locality.

Diagnosis.—Entire dorsal surface Chaetura Black, no appreciable lightening on sides or belly; hands and feet blackish; tail of same color as dorsum. Dorsal surface of skull concave above orbits; rostrum long and narrow; maxillary tooththrow relatively straight and uncrowded; fourth unicuspid visible in lateral view; teeth rather heavily pigmented.

Comparisons.—From *Cryptotis zeteki*, *C. endersi* differs in larger size; darker color; and longer, straighter tooththrow. In all cranial measurements *C. endersi* is noticeably larger.

From *Cryptotis jacksoni*, *C. merus*, *C. gracilis*, and *C. orophila*, *C. endersi* may be distinguished by its larger size and larger skull.

From *Cryptotis thomasi*, *C. endersi* is somewhat smaller in body size and smaller in all cranial measurements taken; noticeably in the greatest width of the skull and in the length and width of the rostrum.

From *Cryptotis meridensis*, *C. endersi* is smaller in all respects, particularly in cranial measurements, in the length and width of the rostrum and the greatest width of the skull.

Measurements.—The type measures as follows: Total length 109; length of tail 36; length of hind foot 12; length of upper tooththrow entire 9.4; zygomatic width 6.2; greatest length of skull 21.2; greatest width of skull 9.8; width of M^1 1.7; condylobasal length 20.2; width across M^2 - M^2 5.7.

Remarks.—The type of *C. endersi* was taken in heavy forest near a rotting log by Dr. Enders in the course of zoological field work in the Chiriquí section of Panama. Morphologically, this shrew is nearest *Cryptotis meridensis* from Colombia, although the two species may be distinguished by the characters set forth under comparisons.

Latin American shrews appear to fall into two main groups, on the basis of their dental pattern. *Cryptotis meridensis* can be considered rather typical of the larger, straighter tooththrow kind and *Cryptotis nigrescens* of the smaller, angular tooththrow group. Additional specimens, and in particular a series of one kind from any given locality, are needed in order to define the amount of variation obtaining in shrews from Central and South America.

Specimen examined.—One, the type.